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EXAMINER

GELLNER, JEFFREY L

ART UNIT	PAPER NUMBER
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3643

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/808,156

Applicant(s)

SMITH ET AL.

Examiner

Jeffrey L. Gellner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Affidavit under 37 CFR 1.131 from Don W. Smith***

The affidavit filed on 1 February 2005 under 37 CFR 1.131 has been considered but is ineffective to overcome the Garrett (Dallas Morning News) reference. The affidavit is deemed ineffective because it lacks original exhibits of drawings or records, or photocopies thereof, or an explanation for their absence, as to the date of reduction to practice of the instant invention by the inventor that pre-dates the prior art. That is, Affiant's statement at the bottom of page 3 of the affidavit is not supported.

### ***Requirement for information under 7 CFR 1.105***

On the top of page 4 of the affidavit of Don W. Smith the Affiant states that "at about the time of the GARRETT reference, the inventors had discussed the subject of our present invention with others in Texas, as relating to Post Oak trees." Since the published date of the Garrett reference (November 1999) predates the effective filing date of the instant application (12 September 2000) and Affiant admits that "others" were told of the invention about the date of the Garrett reference, Examiner requests information, persons' names and dates, pertaining to any disclosures by the inventors to "others" before the effective filing date of the instant application, particularly those disclosures about the date of November 1999.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-27 and 29-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The added subject matter of "characterized by a ratio reduction between root structure to canopy volume is insufficient such that the root structure is insufficient to support the canopy volume" of claims 1, 10, 18, 22, 26, 27, 29, and 30-33 was not disclosed in the original specification.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 18, 20, 22, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US 4,872,899) in view of Dale (Fred Dale Special to The Star).

As to Claims 1, 3, 18, and 26, Miller discloses a method of treating established (defining "mature" of col. 9 line 66 as established) distressed (general teaching from "iron chlorosis" of abstract) tree (col. 9 lines 66) exhibiting a decline in health (col. 1 lines 67-68), a root system in soil (col. 9 lines 62-63) comprising applying a previously created mixture to the root system (col.

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9 lines 62-67), a container (inherent in “banded” of col. 9 line 64); and, a tool for applying the mixture to the root system within the soil (inherent in “banded” of col. 9 line 64). . Not disclosed are the steps of creating a mixture of a fertilizer and a growth hormone in the container, and the tree characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy. Dale discloses the step of creating a mixture of fertilizer and a root hormone (page 2 1<sup>st</sup> para.), and transplants are known to have reduced root structure compared to canopy volume; it is well known to pre-mix an agricultural mixture in a container and apply directly to the soil. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Miller by using with the mixture Dale so as to increase plant growth and to apply to transplants, plants with reduced ratios of root to canopy, so as to expand the use of the mixture.

As to Claim 20, the limitations of Claim 18 are disclosed as described above. Not disclosed is creating the hole with a water jet. Examiner takes official notice that it is old and notoriously well known to make a hole with a water jet. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Miller as modified by Dale by using a water jet so as to make the hole in an easy manner.

As to Claim 22, Miller discloses a kit for treating established (defining “mature” of col. 9 line 66 as established) distressed (general teaching from “iron chlorosis” of abstract) tree (col. 9 lines 66) exhibiting a decline in health (col. 1 lines 67-68), the root system in soil (col. 9 lines 62-63) comprising a previously prepared mixture (ferrated rhodotorulic acid” of col. 9 line 62); a container (inherent in “banded” of col. 9 line 64); and, a tool for applying the mixture to the root

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system within the soil (inherent in “banded” of col. 9 line 64). Not disclosed the mixture containing a fertilizer and a growth hormone, and the tree characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy.. Dale discloses a mixture of fertilizer and a root hormone (page 2 1<sup>st</sup> para.). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the kit of Miller by using with the mixture Dale so as to increase plant growth and to apply to transplants, plants with reduced ratios of root to canopy, so as to expand the use of the mixture..

As to Claim 24, the limitations of Claim 22 are disclosed as described above. Not disclosed are instructions for applying the mixture. Examiner takes official notice that it is old and notoriously well known in the agronomic art on the instructions as to how to apply fertilizer by banding (col. 9 line 64 of Miller). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the kit of Miller as modified by Dale by having instructions so as to band correctly.

As to Claim 25, Miller as modified by Dale further disclose an implement for applying the mixture (inherent in “banded” of Miller col. 9 line 64).

Claims 2, 10-17, 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US 4,872,899) in view of Dale (Fred Dale Special to The Star) in further view of Green Light Rootone.

As to Claim 2, the limitations of Claim 1 are disclosed as described above. Not disclosed is the use of NAA for the growth hormone. Green Light Rootone, however, discloses the use of NAA as a growth hormone. It would have been obvious to one of ordinary skill in the art at the

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time of the invention to further modify the method of Miller as modified by Dale by using Rootone as the growth hormone as disclosed by Green Light Rootone as a known effective root stimulant for use with a wide variety of plants (see Green Light Rootone).

As to Claim 10, Miller discloses mixture (defined as “drench” of Col. 9 line 63) for treating adult (defining “mature” of col. 9 line 66 as established) distressed (general teaching from “iron chlorosis” of abstract) tree (col. 9 lines 66) exhibiting a decline in health (col. 1 lines 67-68), the root system in soil (col. 9 lines 62-67). Not disclosed is the mixture comprising a fertilizer and NAA and the tree characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy. Dale discloses a mixture of fertilizer and a root hormone (page 2 1<sup>st</sup> para.) and transplants are known to have reduced root structure compared to canopy volume. Green Light Rootone discloses a root growth hormone of NAA. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mixture of Miller by using the mixture Dale so as to increase plant growth and to further modify the mixture by using Rootone as disclosed by Green Light Rootone depending upon availability of growth hormones and to apply to transplants to increase the use of the mixture.

As to Claim 11, the mixture of Miller as modified by Dale as further modified by Green light Rootone further disclose the hormone comprising about 0.1% weight of the powder (defining “0.2%” as about 0.1% at Green Light Rootone).

As to Claim 12, the mixture of Miller as modified by Dale as further modified by Green light Rootone further disclose the hormone comprising about 0.1% weight of the liquid (defining

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"0.2%" as about 0.1% at Green Light Rootone) when applied as a liquid ("drench" of Miller at col. 9 line 63).

As to Claim 13, the limitations of Claim 10 are disclosed as described above. Not disclosed is a dosage of .335 milligrams per application site. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the mixture of Miller as modified by Dale and Green Light Rootone by using the specific growth hormone concentrations of .335 milligrams per application site so as to optimize the system and promote healthy root growth.

As to Claim 14, the limitations of Claim 10 are disclosed as described above. Miller as modified by Dale and Green Light Rootone further disclose a fertilizer with an N content of 10% and a potassium content of 10 % (see Dale). Not disclosed is the P content at 25%. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Miller as modified by Dale and Green Light Rootone by using a fertilizer with a P content of 25% depending upon availability of fertilizers.

As to Claim 15, Miller as modified by Dale and Green Light Rootone further disclose a mixture of liquids ("drench" of Miller at col. 9 line 63).

As to Claims 16 and 17, Miller as modified by Dale and Green Light Rootone further disclose Thiram in a root mixture (see Green Light Rootone).

As to Claim 19, the limitations of Claim 18 are disclosed as described above. Not disclosed is the use of NAA for the growth hormone. Green Light Rootone, however, discloses the use of NAA as a growth hormone. It would have been obvious to one of ordinary skill in the



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art at the time of the invention to further modify the method of Miller as modified by Dale by using Rootone as the growth hormone as disclosed by Green Light Rootone as a known effective root stimulant for use with a wide variety of plants (see Green Light Rootone).

As to Claim 23, the limitations of Claim 22 are disclosed as described above. Not disclosed is the growth hormone being NAA. Green Light Rootone, however, discloses the use of NAA as a growth hormone. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the kit of Miller as modified by Dale by using Rootone as the growth hormone as disclosed by Green Light Rootone as a known effective root stimulant for use with a wide variety of plants (see Green Light Rootone).

Claims 27-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (US 4,872,899) in view of Dale (Fred Dale Special to The Star) in view of Garrett (The time is not ripe to start potatoes).

As to Claim 27-33, Miller discloses a method of treating a distressed (general teaching from "iron chlorosis" of abstract) tree (col. 9 lines 66), comprising applying a mixture to the root area (col. 9 lines 62-67). Not disclosed are the steps of creating a mixture of a fertilizer and a growth hormone and the tree exhibiting reduced number of root hairs, thinning canopy, water spouts on large limbs, and cessation of leaf production, roots with general injury, low growth, and the tree dying; and, and the tree characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support the canopy. Dale discloses the step of creating a mixture of fertilizer and a root hormone (page 2 1<sup>st</sup> para.), and transplants

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are known to have reduced root structure compared to canopy volume;; Garrett discloses a tree exhibiting reduced number of root hairs, thinning canopy, water spouts on large limbs, and cessation of leaf production roots with general injury, low growth, and the tree dying (Garrett's last question on page 1 carrying over to top of page 2 in that the tree is a post oak suffering from damage during construction). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Miller by using with the mixture Dale so as to increase plant growth and to apply to post oaks exhibiting the above symptoms since the post oak is a tree that cannot handle much disturbance or stress (see Garrett at page 2 2<sup>nd</sup> para.) and to apply to transplants, plants with reduced ratios of root to canopy, so as to expand the use of the mixture.

As to claim 34, Miller as modified by Dale as further modified by Garrett further disclose an oak (see Garrett at bottom of page 1 and top of page 2).

### ***Allowable Subject Matter***

Claims 4-9, and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments filed 1 February 2005 have been fully considered but they are not persuasive. The crux of Applicant's arguments are: (1) the Garrett reference teaches away from the invention because post oaks are fragile and cannot handle much disturbance or stress

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(Remarks page 15); (2) Miller does not disclose a distressed tree as one characterized by a ratio reduction between root structure to canopy volume such that the root structure is insufficient to support canopy volume (Remarks bottom half of page 17); (3) Miller does not disclose applying a mixture in a subterranean fashion (Remarks page 17 last para.); and, (4) Dale does not disclose applying a mixture in a subterranean fashion (Remarks page 18 third para.).

As to argument (1), the Garrett does not preclude the use of the instant invention since “[i]t sounds like a good idea.” Garrett is only expressing his particular preference. See MPEP 2123 for holding that a “reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments.”

As to argument (2), the rejection has been changed to accommodate this change in claim language.

As to argument (3), Miller does disclose adding a mixture in a subterranean fashion in that it is banded (Miller col. 9 lines 63-65).

As to argument (4), Miller, not Dale, discloses adding a mixture in a subterranean fashion in that it is banded (Miller col. 9 lines 63-65).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

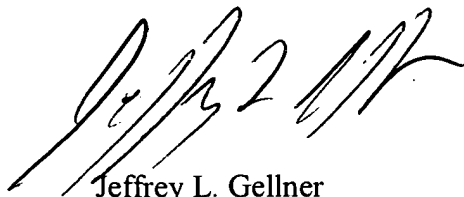
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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jeffrey L. Gellner whose phone number is 571.272.6887. The Examiner can normally be reached Monday through Thursday from 8:30 am to 4:00 pm. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Peter Poon, can be reached at 571.272.6891. The official fax telephone number for the Technology Center where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'J. L. Gellner', is written over the printed name and title.

Jeffrey L. Gellner  
Primary Examiner